UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,656	02/26/2007	Frank Hundscheidt	P18107-US1	6549

27045 7590 12/23/2010

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER	
MILLS, DONALD L	

ART UNIT	PAPER NUMBER
2462	

NOTIFICATION DATE	DELIVERY MODE
12/23/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

kara.coffman@ericsson.com
jennifer.hardin@ericsson.com
melissa.rhea@ericsson.com

Office Action Summary	Application No.	Applicant(s)	
	10/556,656	HUNDSCHEIDT ET AL.	
	Examiner	Art Unit	
	DONALD L. MILLS	2462	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 12 November 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication (in particular, "Multimedia Multi-Network: A new Concept Multi-reseaux Multimedia: Un Nouveau Concept") or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi (US 2001/0027484 A1) in view of Rhee et al. (US 2004/0081092 A1), hereinafter referred to as Rhee.

Regarding claims 1, 9, 13, and 12, Nishi discloses a quality assured network service provision system compatible with a multi-domain network and service provision method and service broker device, which comprises:

Receiving or defining a service level agreement in a service level specification, distributing the service level specification to the first and the second node by means of

partitioning or by means of replication; and Controlling the first and the second node and thus ensuring that the sum of the provided quality of service on said connections between the two communication partners does not exceed limits defined in the service level specification (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, the bandwidth broker 23 ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049. The service level agreement management device 231 registers the service information agreed upon between the providers in the service level agreement storage section 221, and also manages such information. Furthermore, the service level agreement management device 231 also provides an interface for registering, editing and deleting service level agreement information input via the output device 21. See paragraph 0051. The workflow server 24, like the bandwidth broker 23, is a system with a function for processing data which is operated by program control, and is connected to the bandwidth broker 23, the customer care server 25, the design server 27, the policy server 26, and the network management device 28 respectively. The workflow server 24 sends the necessary processing commands to each server and manages the progress of the commands in accordance with a workflow and an operation flow defined by the provider. See paragraph 0054 and 0058-0060.)

Nishi does not disclose first and second network edge nodes.

Rhee teaches an admission control method in Internet Differentiated Service Networks, which comprises dividing an admission control function executed at an ingress edge node of the Internet differentiated service network into a path level and a link level. Path level admission control function is performed at an ingress edge node without communication with a bandwidth broker by enabling the path level to use a specific bandwidth being initially allocated to a corresponding path by a bandwidth broker and performing a link level admission control function through the use of a measurement based admission control method in coordination with an egress node (controlling the first and second network edge node and thus ensuring that the sum of the provided quality of service on said connections between the two communication partners does not exceed limits defined in the service level specification) (See paragraphs 33-38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the dynamic provisioning of Rhee in the system of Nishi. One of ordinary skill in the art at the time of the invention would have been motivated to do so to adapt to network status without complete reliance on a centralized bandwidth management system, as taught by Rhee (See paragraph 0012).

Regarding claim 2, the primary reference further teaches wherein the step of controlling is performed by a control node that is connected to the first and second network edge node (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, the bandwidth broker 23 is connected to the network cluster and ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a

service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Regarding claim 3, the primary reference further teaches wherein at least one of said first and second network entities is connected to and adapted to be controlled by more than one control node and the control node can control more than one network edge node (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, the bandwidth broker 23 is connected to the network cluster and ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Regarding claim 4, the primary reference further teaches wherein in case of partitioning the first network edge node handles a first kind of service requests and the second network edge node handles a second kind of service requests (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices which may handle many unique service requests, the bandwidth broker 23 is connected to the network cluster and ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Regarding claims 5, 11, and 14, the primary reference further teaches wherein in case of replication each of the first and the second network entities handles up to a certain share of the quality of service permitted by the service level agreement (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, the bandwidth broker 23 ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049. The service level agreement management device 231 registers the service information agreed upon between the providers in the service level agreement storage section 221, and also manages such information. Furthermore, the service level agreement management device 231 also provides an interface for registering, editing and deleting service level agreement information input via the output device 21. See paragraph 0051. The workflow server 24, like the bandwidth broker 23, is a system with a function for processing data which is operated by program control, and is connected to the bandwidth broker 23, the customer care server 25, the design server 27, the policy server 26, and the network management device 28 respectively. The workflow server 24 sends the necessary processing commands to each server and manages the progress of the commands in accordance with a workflow and an operation flow defined by the provider. See paragraph 0054 and 0058-0060.)

Regarding claims 6, 10, and 15, the primary reference further teaches wherein a network edge node is an edge node (Referring to Figures 1-3, bandwidth broker 23 is a system with a data

processing function operated by program control for managing services in a network cluster comprising multiple devices, including edge devices, the bandwidth broker 23 ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Regarding claim 7, the primary reference further teaches wherein a control node is a bandwidth broker (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, including edge devices, the bandwidth broker 23 ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Regarding claim 8, the primary reference further teaches wherein the bandwidth broker communicates to edge nodes by using multicasting (Referring to Figures 1-3, bandwidth broker 23 is a system with a data processing function operated by program control for managing services in a network cluster comprising multiple devices, in which multiple devices are communicated with equivalent to mullticasting, the bandwidth broker 23 ensures that devices with the network cluster do not exceed their service level agreements. The bandwidth broker 23 comprises an external system communication device 233, a security management device 234, a

service level agreement management device 231, a domain route management device 232, and an internal system communication device 235. See paragraph 0049.)

Response to Arguments

4. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DONALD L. MILLS whose telephone number is (571)272-3094. The examiner can normally be reached on 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Donald L Mills/
Primary Examiner, Art Unit 2462